

FIG. 1

Replacement Sheet 2/17

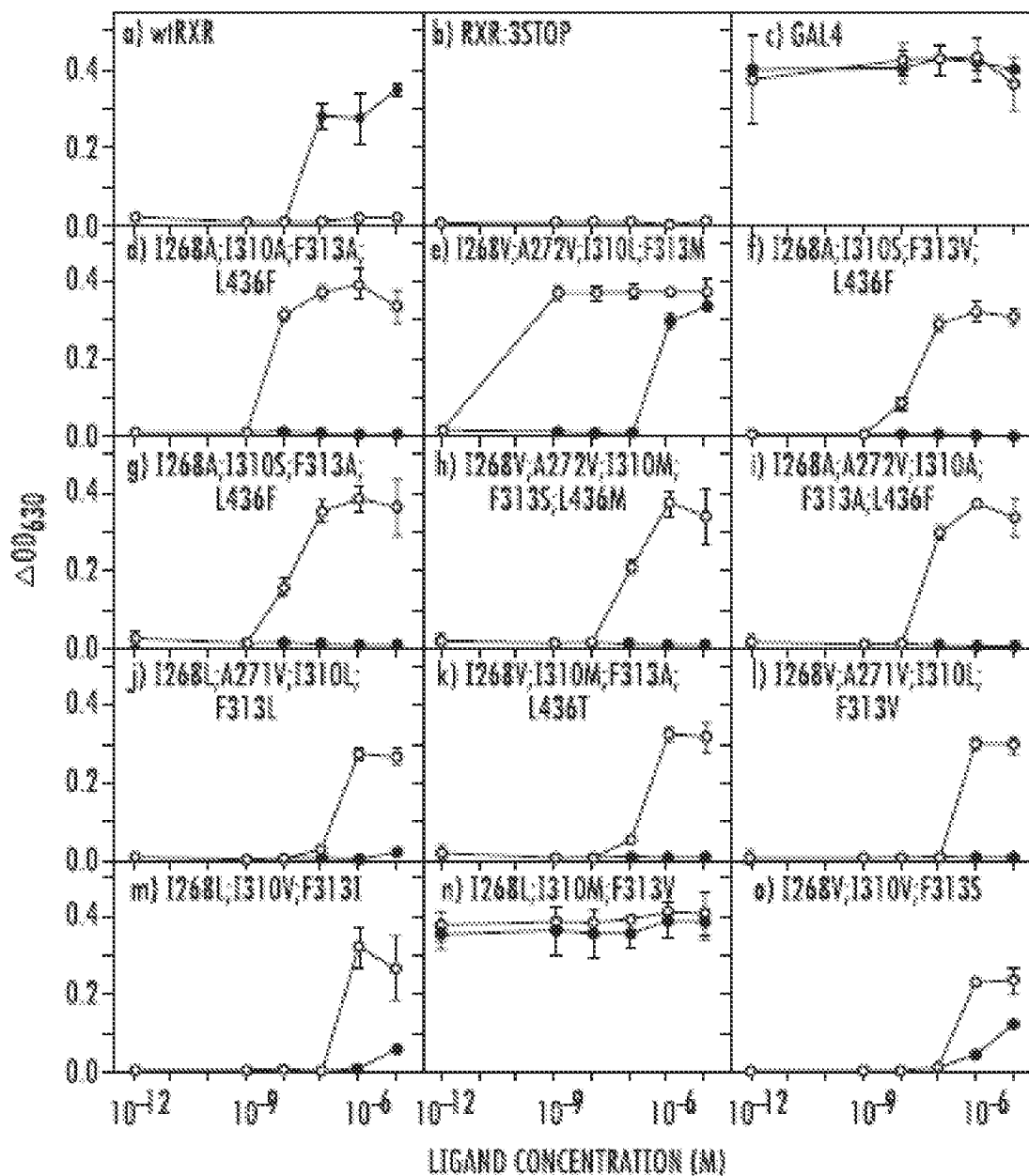


FIG. 2

Replacement Sheet 3/17

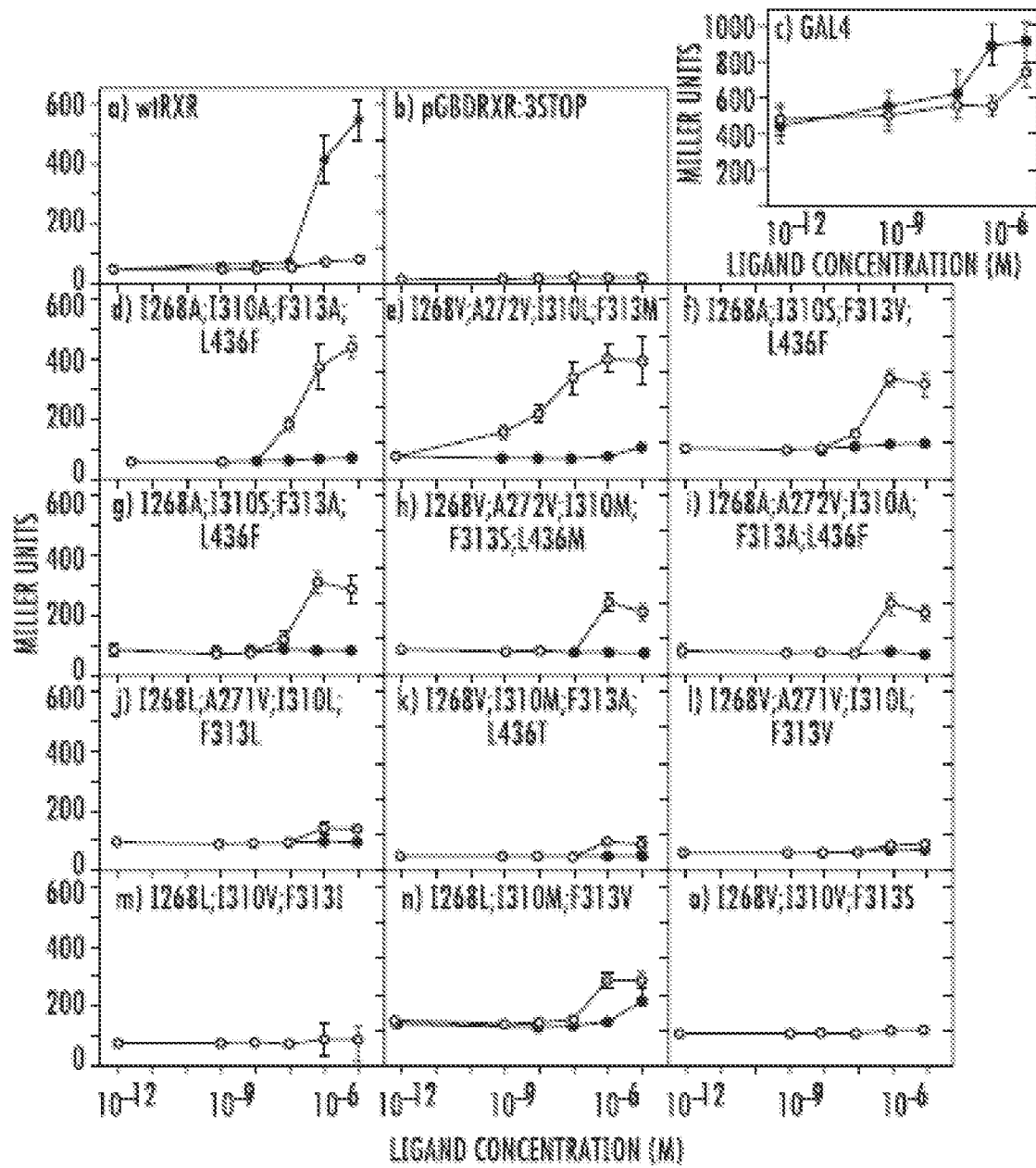


FIG. 3

Replacement Sheet 4/17

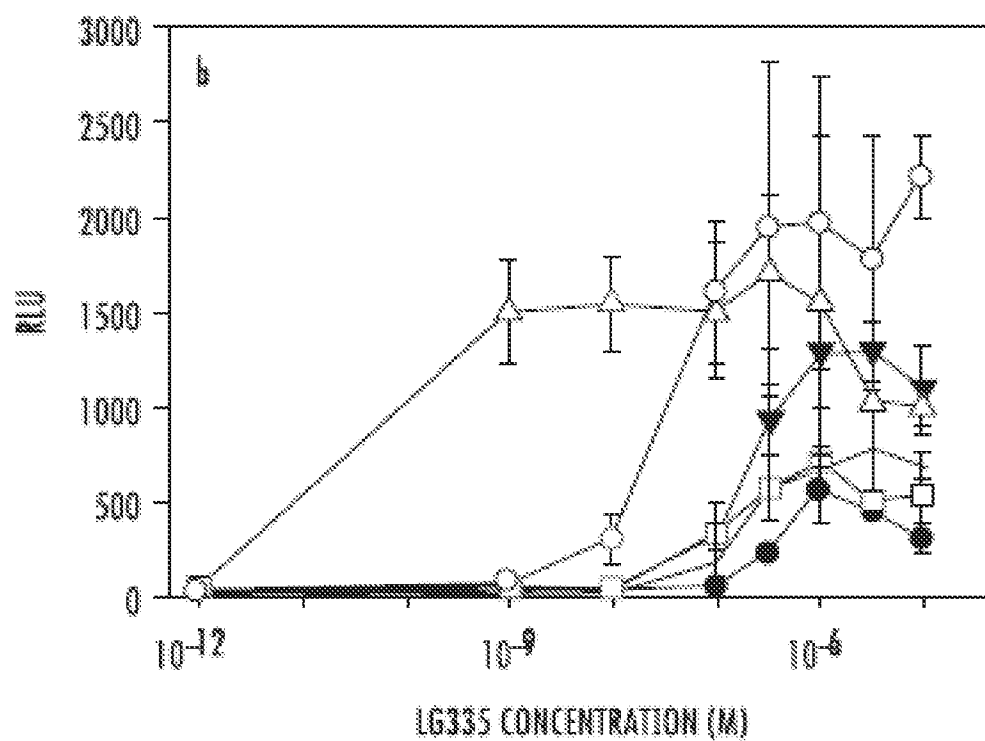
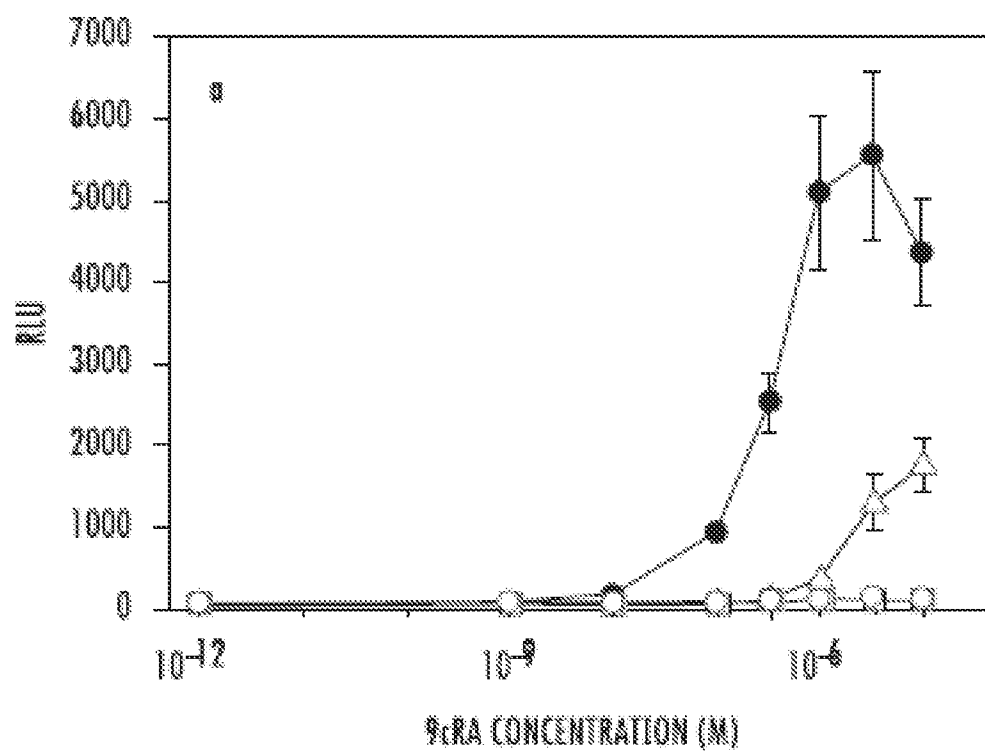


FIG. 4

Replacement Sheet 5/17

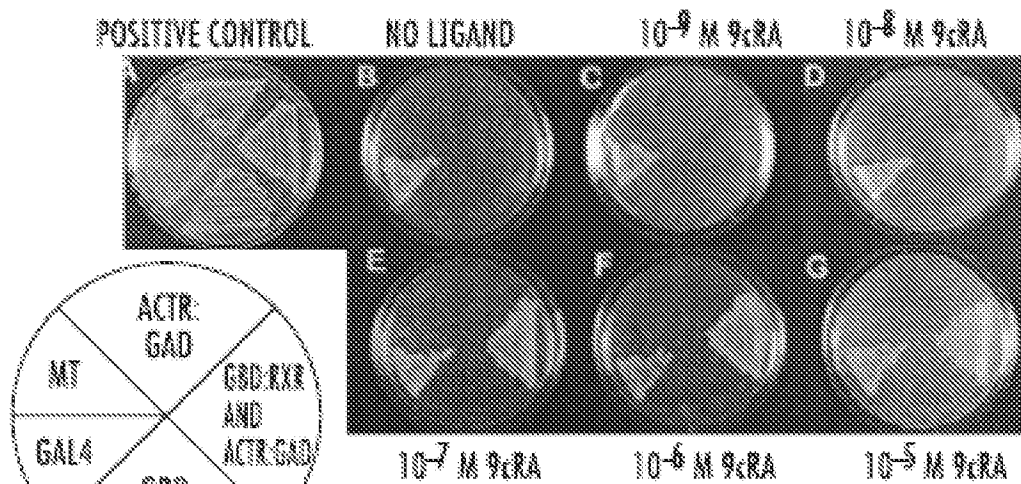


FIG. 5

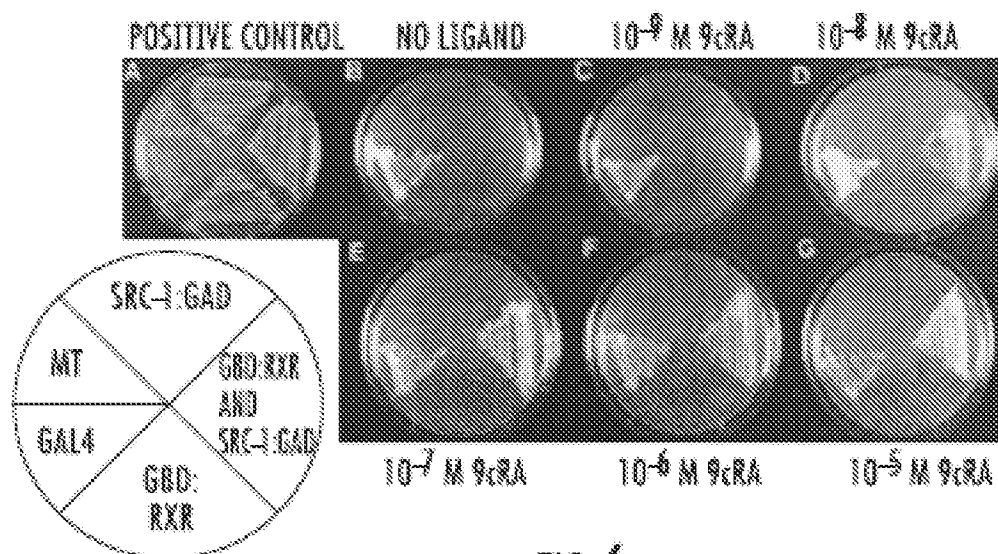


FIG. 6

Replacement Sheet 6/17

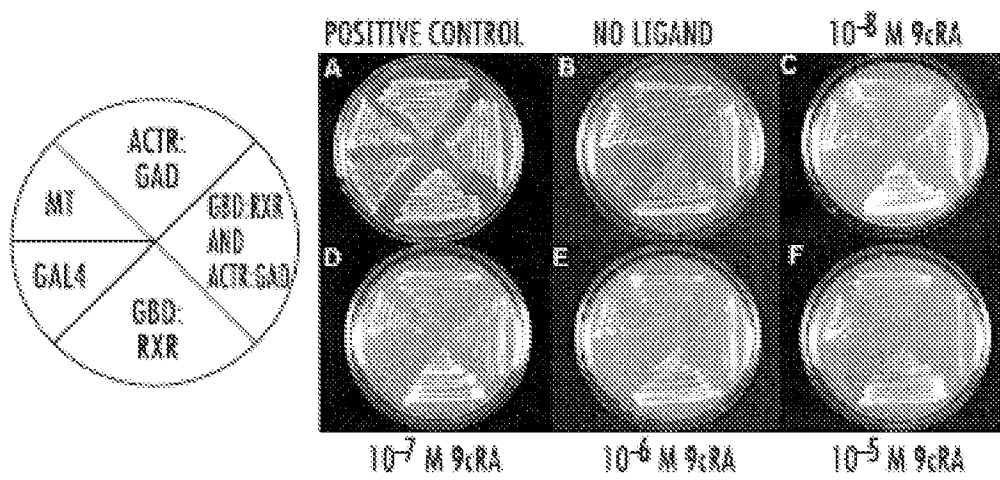
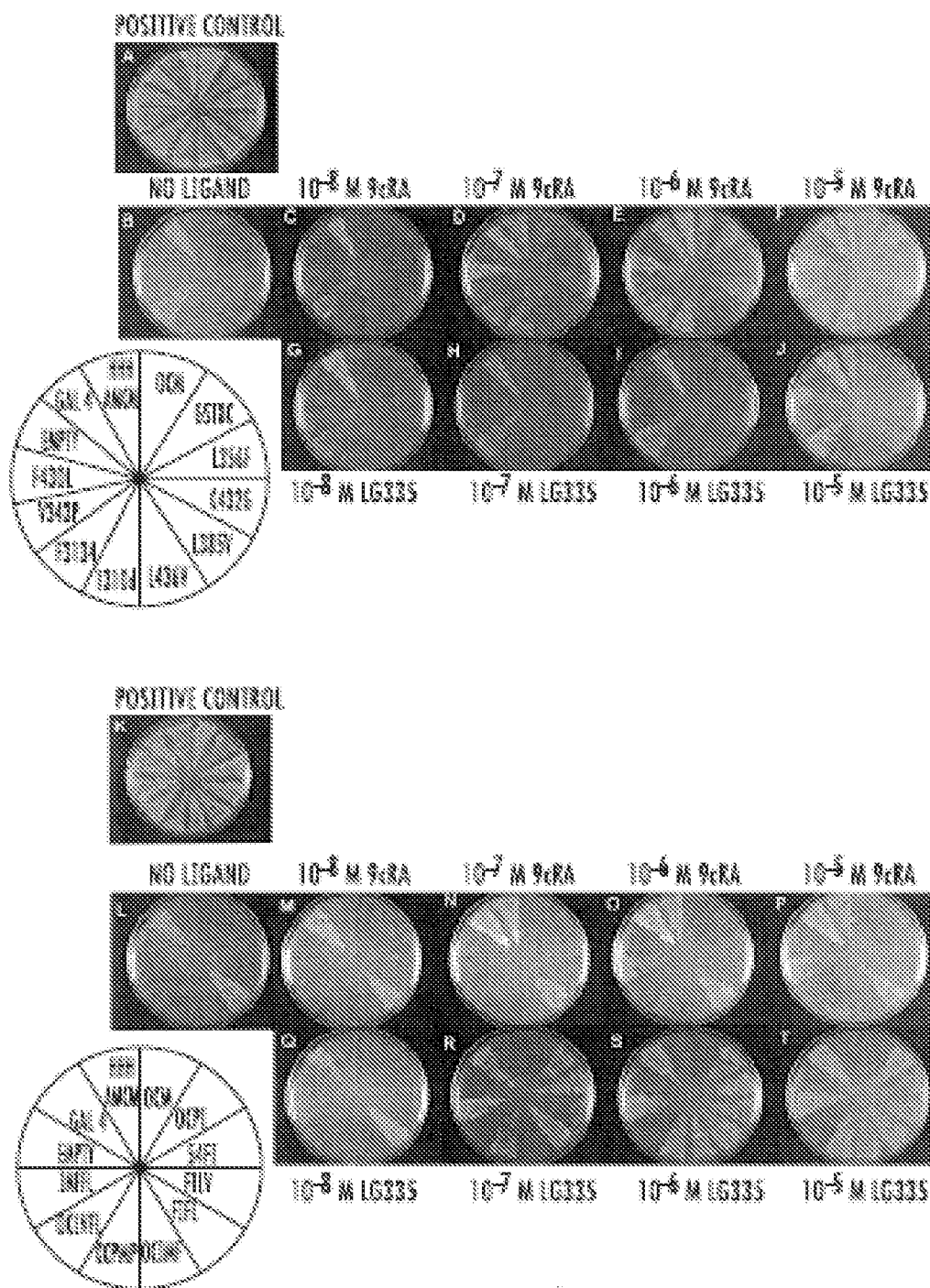
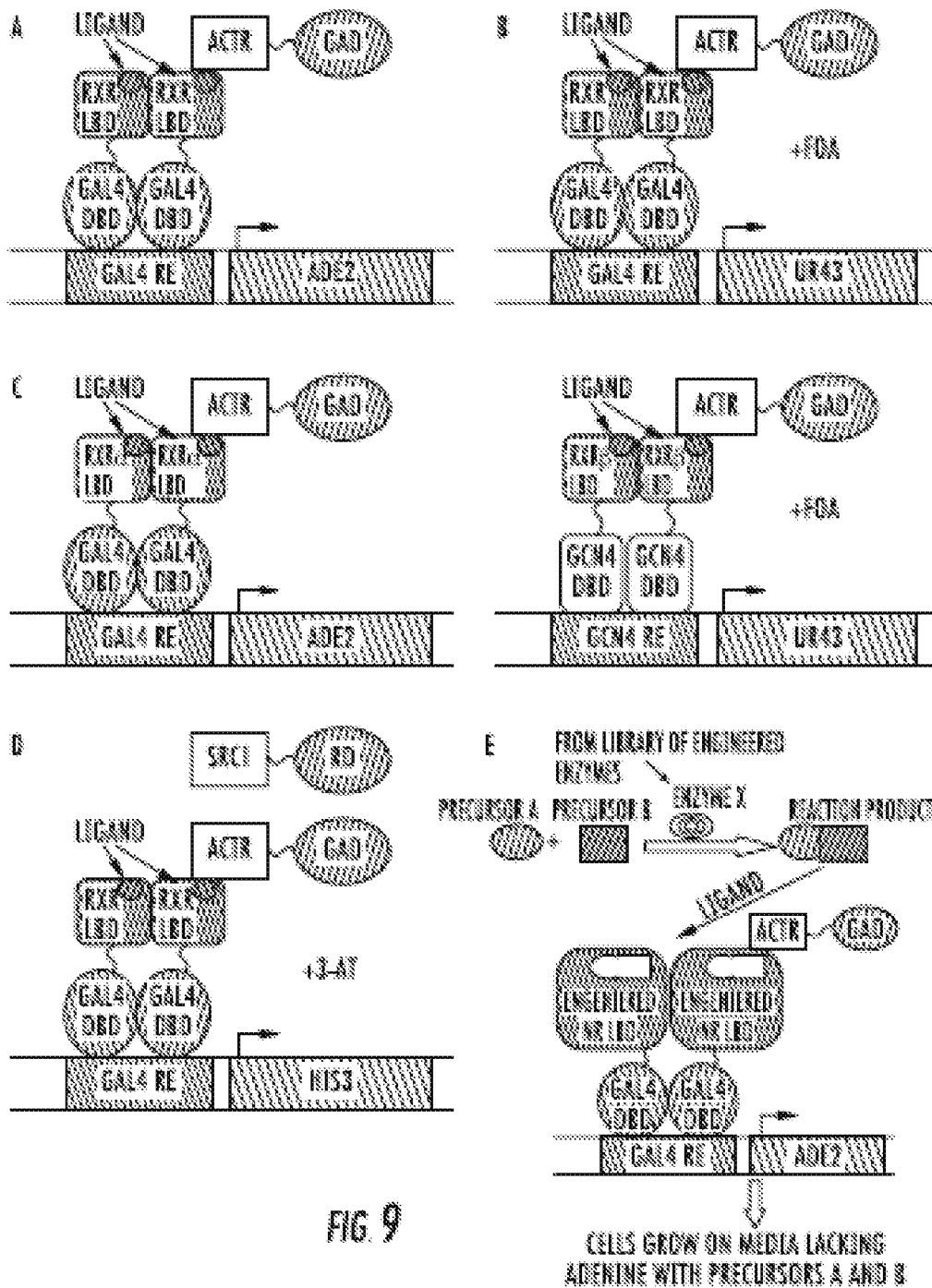


FIG. 7

Replacement Sheet 7/17



Replacement Sheet 8/17



Replacement Sheet 9/17

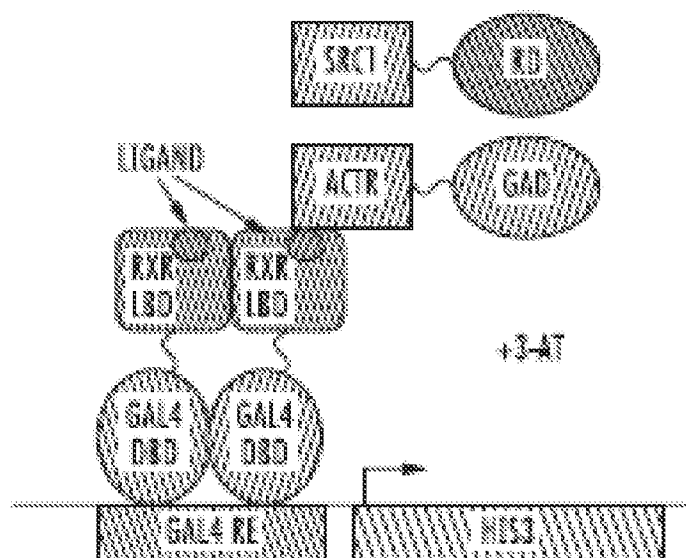


FIG. 10

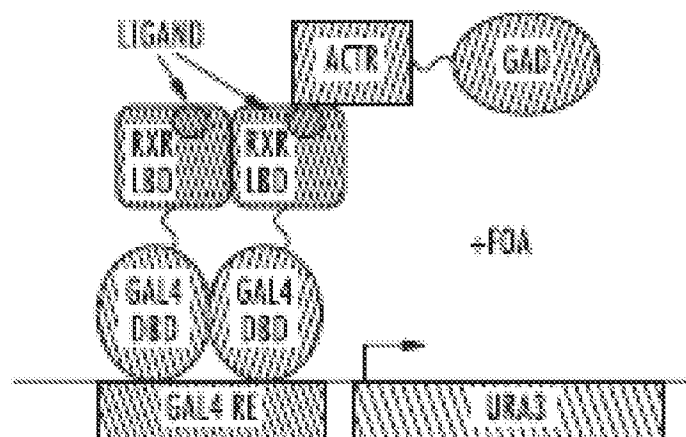


FIG. 11

Replacement Sheet 10/17

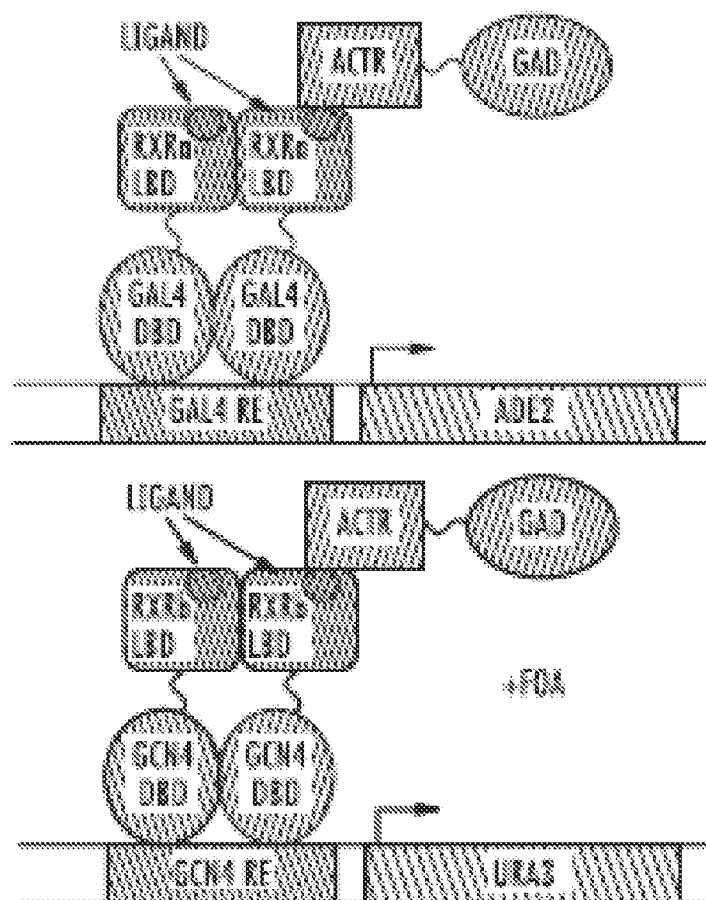


FIG 12

Replacement Sheet 11/17

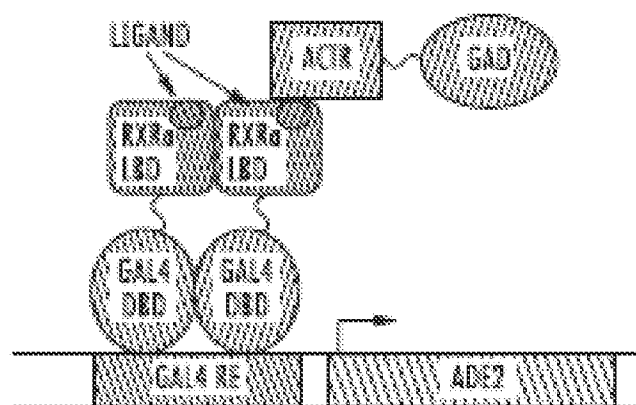


FIG 13

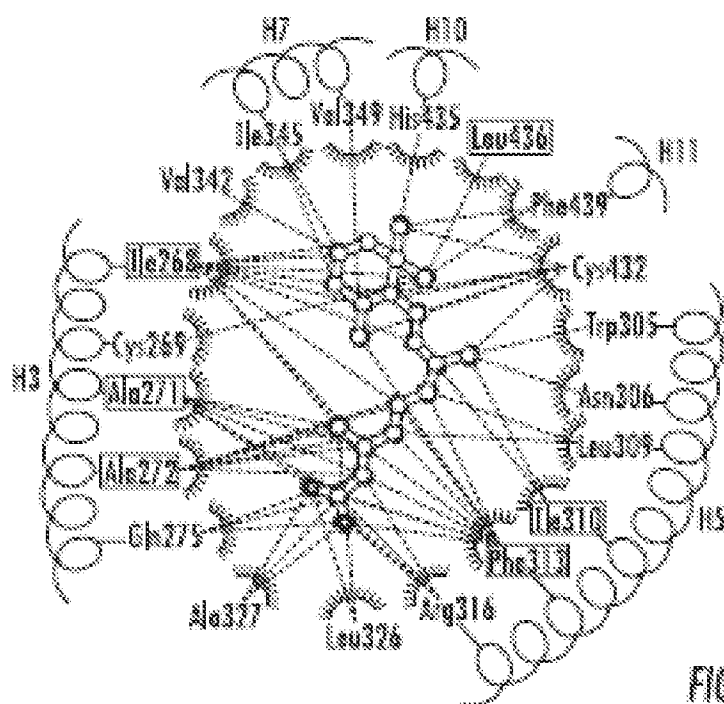


FIG 14

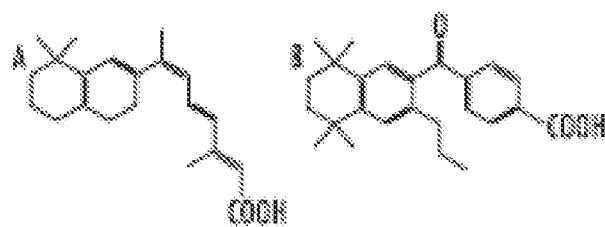


FIG 15

Replacement Sheet 12/17

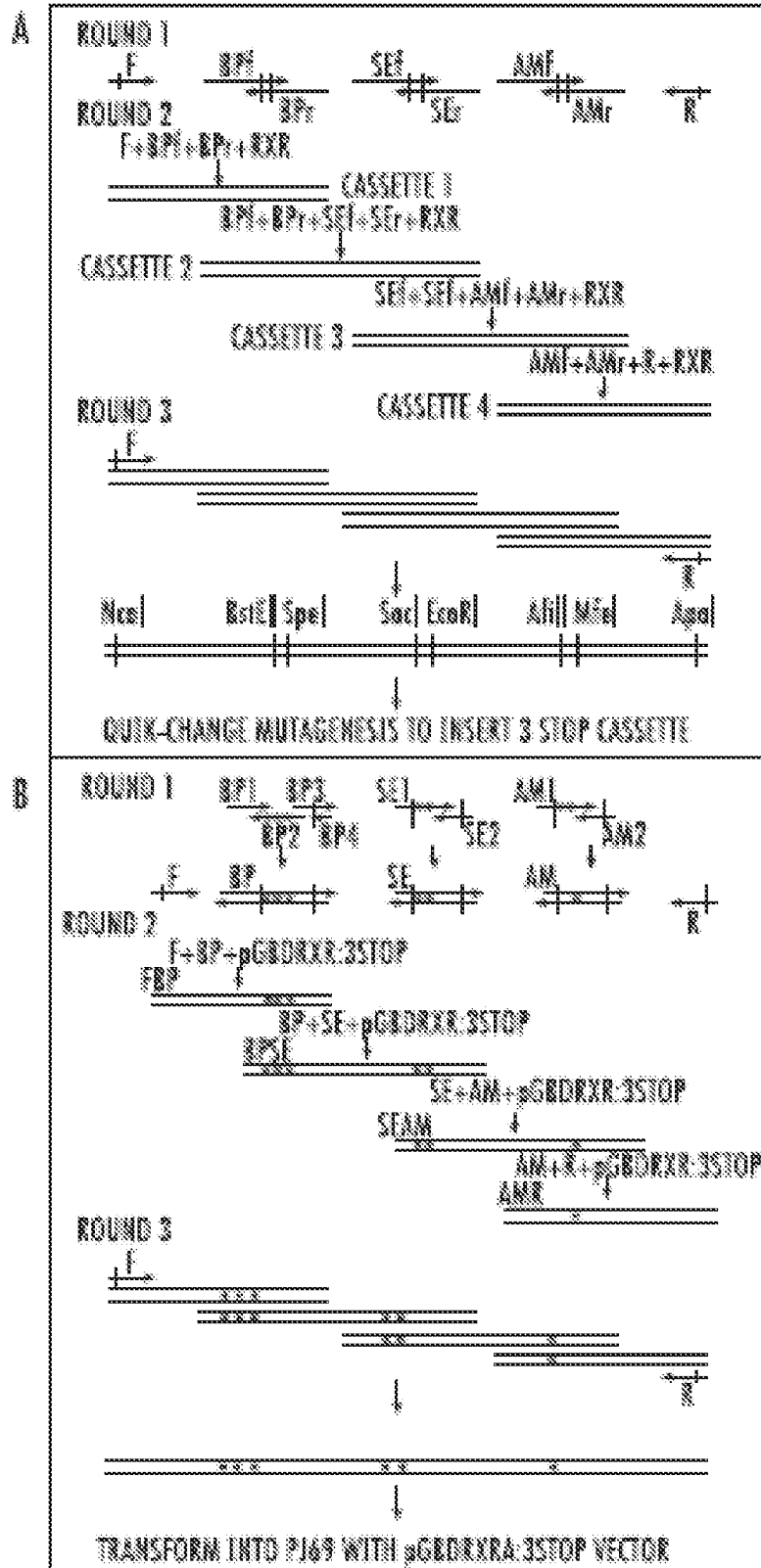
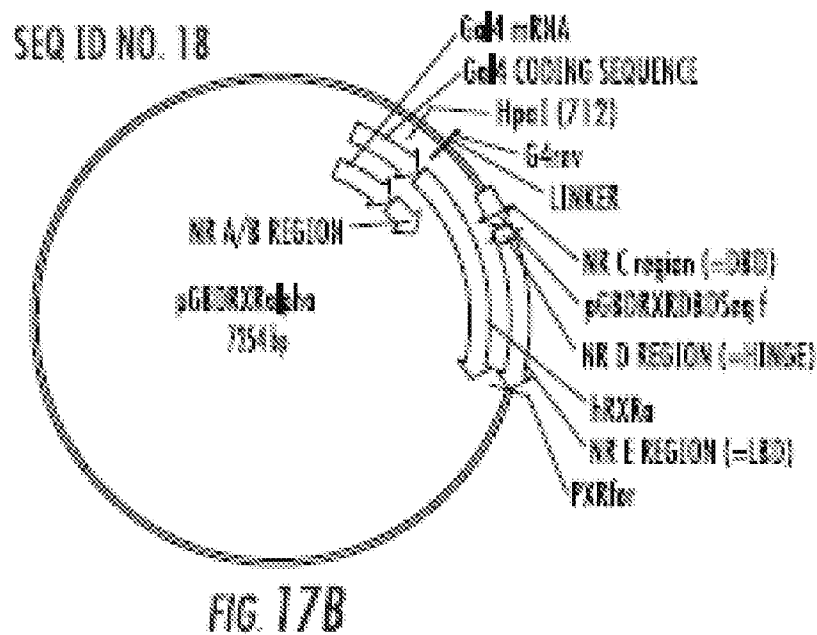
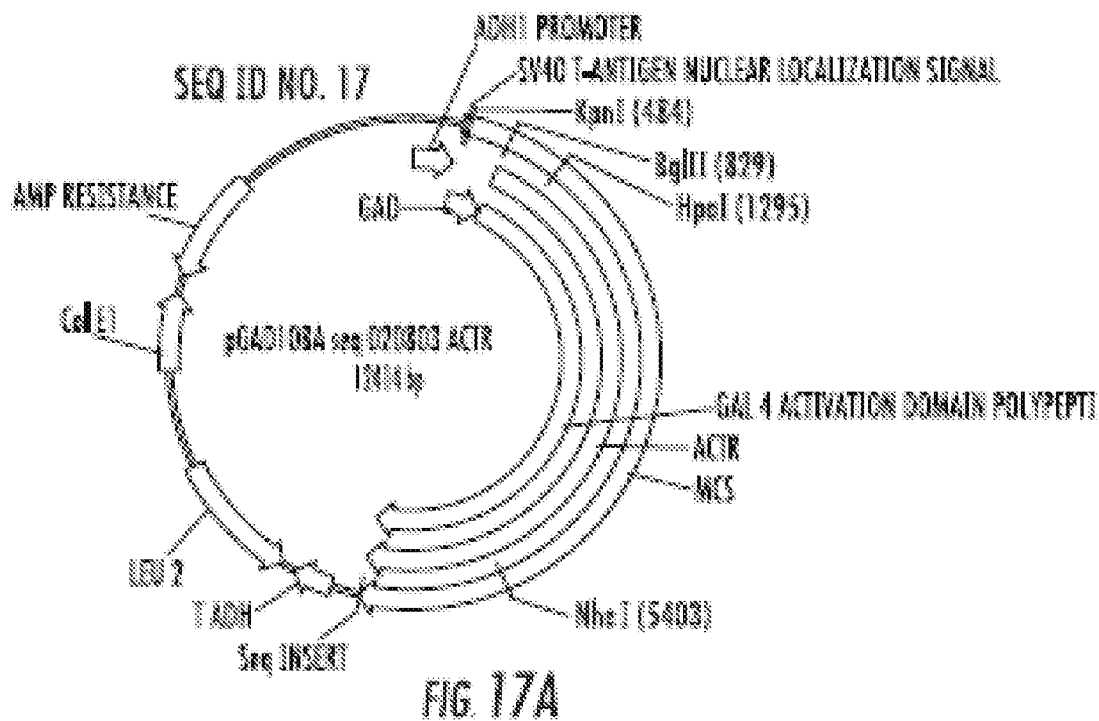


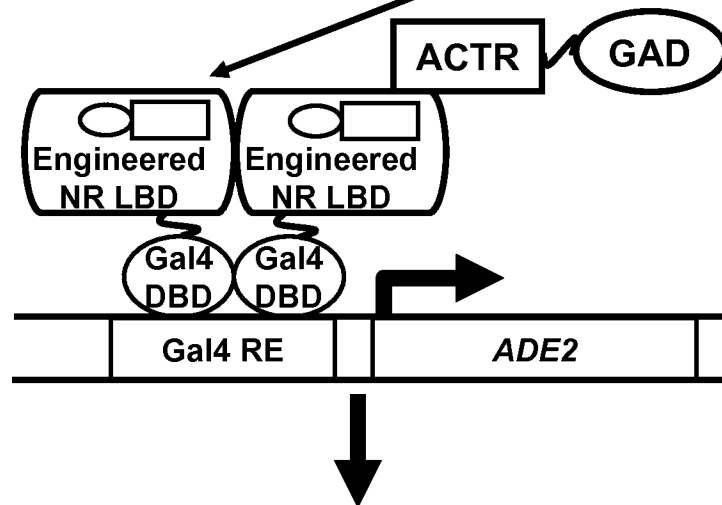
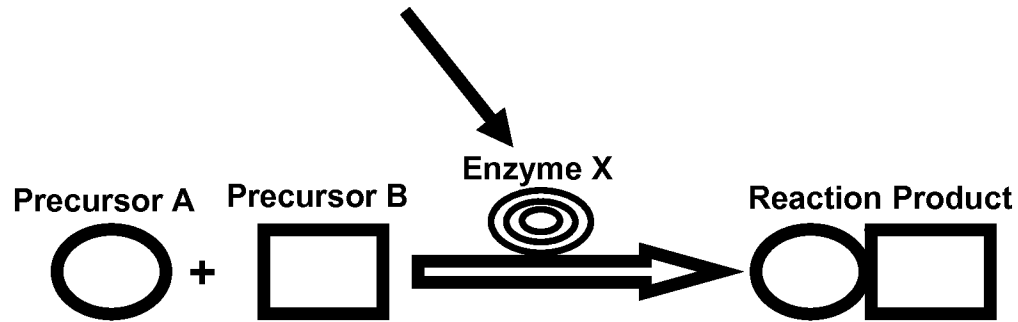
FIG. 16

Replacement Sheet 13/17



Replacement Sheet 15/17

From library of engineered enzymes



Cells grow on media lacking adenine with precursors A and B

Fig. 19

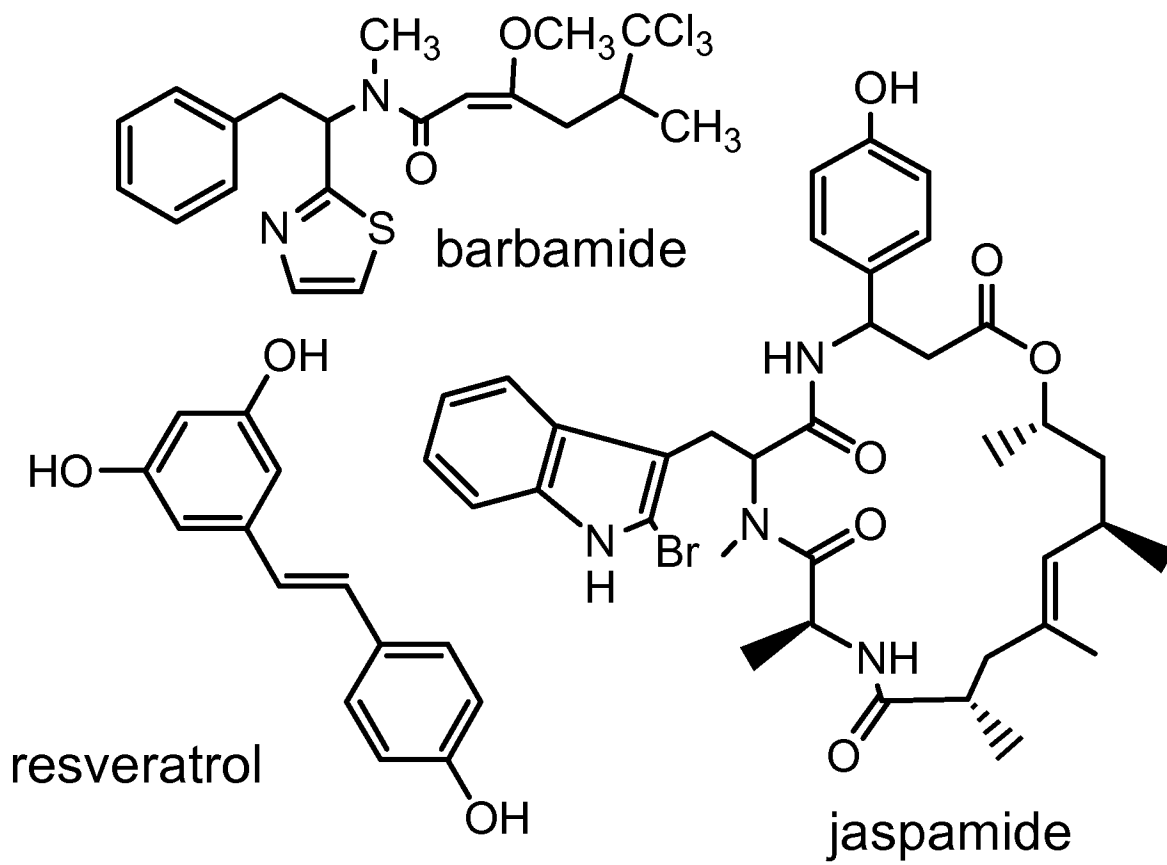


Fig. 20

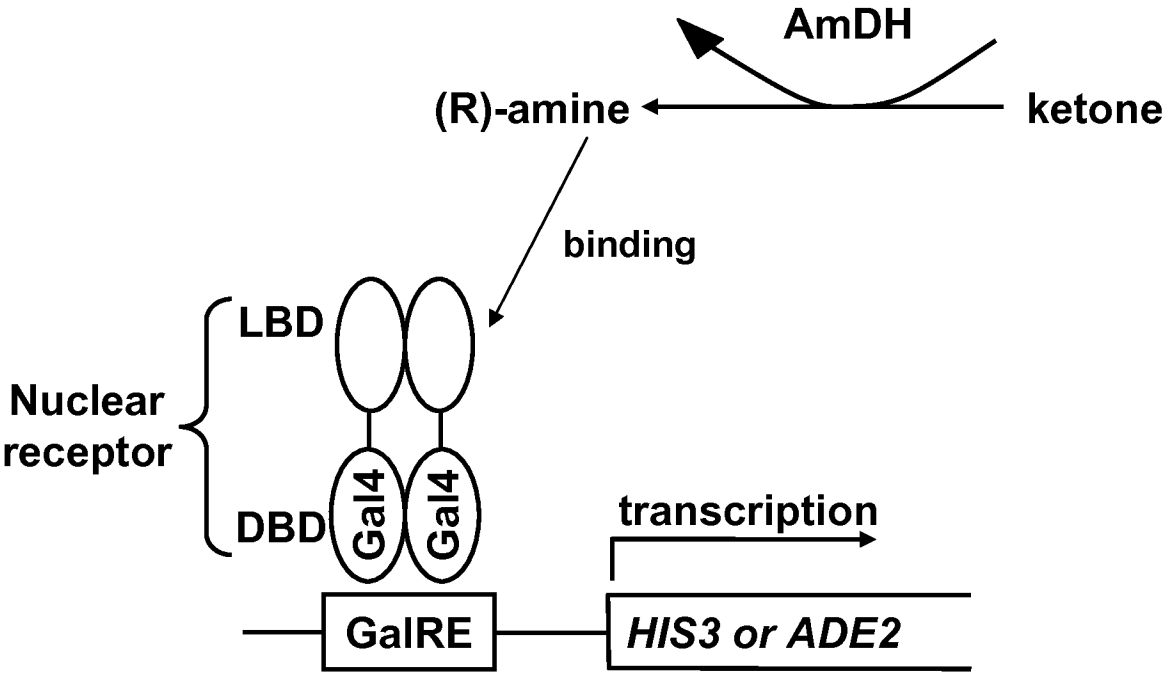


Fig. 21